

## Abstract of the Disclosure

A power supply system for an industrial robot. The power supply includes a transmitting part including a first coil and a first converter for producing an alternating magnetic field from the first coil. The power supply also includes a receiving part including a second coil for providing an alternating current by induction from the alternating magnetic field and a second converter for producing from the alternating current a direct current for providing power to a tool carried by the robot.